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20985	7590	03/11/2005	EXAMINER	
FISH & RICHARDSON, PC 12390 EL CAMINO REAL SAN DIEGO, CA 92130-2081			THANGAVELU, KANDASAMY	
			ART UNIT	PAPER NUMBER
			2123	

DATE MAILED: 03/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/976,680	AMADEO ET AL.	
	Examiner	Art Unit	
	Kandasamy Thangavelu	2123	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 12 October 2001.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-32 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-32 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 12 October 2001 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date _____.
 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date _____.
 5) Notice of Informal Patent Application (PTO-152)
 6) Other: _____.

DETAILED ACTION

1. Claims 1-32 of the application have been examined.

Drawings

2. The drawings submitted on October 12, 2001 are objected to: The figure numbers and the part identifiers are handwritten with non-uniform character sizes in Figures 4 and 5. Printed uniform character size is required.

Specification

3. The disclosure is objected to because of the following informalities:
Specification Page 1, Para 0001, Line 9, "Manufacture of Contact Less Smart cards" appears to be incorrect and it appears that it should be "Manufacture of Contactless Smart cards".

Specification Page 8, Para 0025, Lines 6-7, "An ultrasonic transducer may be sued to heat the wire" appears to be incorrect and it appears that it should be "An ultrasonic transducer may be used to heat the wire".

Specification Page 11, Para 0032, Lines 5-6, "The computer 102 uses the information in the CAD drawing control" appears to be incorrect and it appears that it should be "The computer 102 uses the information in the CAD drawing to control".

Appropriate corrections are required.

Claim Objections

4. The following is a quotation of 37 C.F.R § 1.75 (d)(1):

The claim or claims must conform to the invention as set forth in the remainder of the specification and terms and phrases in the claims must find clear support or antecedent basis in the description so that the meaning of the terms in the claims may be ascertainable by reference to the description.

5. Claims 4, 9, 16, 18, 23 and 28 are objected to because of the following informalities:

In Claim 4, Lines 1-2, "wherein the information comprises the dimensions of the of a corresponding feature" appears to be incorrect and it appears that it should be "wherein the information comprises the dimensions of a corresponding feature".

In Claim 9, Lines 2-3, "controlling a pick-and-place robot operative to place an integrate circuit (IC) module in a hole" appears to be incorrect and it appears that it should be "controlling a pick-and-place robot operative to place an integrated circuit (IC) module in a hole".

In Claim 16, Lines 2-3, "wherein the information comprises the dimensions of the of a corresponding feature" appears to be incorrect and it appears that it should be "wherein the information comprises the dimensions of a corresponding feature".

In Claim 18, Lines 2-4, "the controller is further operative to control a pick-and-place robot operative to place an integrate circuit (IC) module in a hole"

appears to be incorrect and it appears that it should be “the controller is further operative to control a pick-and-place robot operative to place an integrated circuit (IC) module in a hole”.

In Claim 23, Lines 1-2, “wherein the information comprises the dimensions of the of a corresponding feature” appears to be incorrect and it appears that it should be “wherein the information comprises the dimensions of a corresponding feature”.

In Claim 28, Lines 3-5, “instructions causing the machine to control a pick-and-place robot operative to place an integrate circuit (IC) module in a hole” appears to be incorrect and it appears that it should be “instructions causing the machine to control a pick-and-place robot operative to place an integrated circuit (IC) module in a hole”.

Appropriate corrections are required.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. Claims 1-4, 8, 11-17, 19-23, 27 and 30-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Lahiri et al.** (U.S. Patent 6,385,762) in view of **Bashan et al.** (U.S. Patent 6,719,206).

8.1 **Lahiri et al.** teaches Data reduction using rank-of-ranks methodology. Specifically as

per claim 14, **Lahiri et al.** teaches a robotic system controller comprising a display screen and input means (CL2, L62 to CL3, L3; CL3, L36-41 and CL3, L50-5);

a CAD module operative to enable a user to generate a CAD drawing on the display screen and a corresponding CAD drawing file using the input means, the drawing file including information description of desired card features (CL2, L62 to CL3, L3);

a memory device operative to store the CAD drawing file (CL2, L62 to CL3, L3);

a controller operative to access the information in the CAD drawing file (CL3, L36-41);

and control a robotic system to perform diagnostic testing of the PC board using the accessed information (CL3, L36-41 and CL3, L50-54).

Lahiri et al. does not expressly teach a controller operative to access the information and control a system to produce one or more of the desired feature using the accessed information.

Bashan et al. teaches a controller operative to access the information and control a system to produce one or more of the desired feature using the accessed information (CL1, L9-11; CL1, L23-25; CL1, L53-56; CL1, L60-63; CL1, L64-67; CL2, L36-37; Fig. 2), because smart cards have a programmable microcomputer for bi-directional communication (CL1, L9-11; CL1, L23-25); and an antenna coil in the chip card to receive data from and transmit data to a reading device a having a similar antenna (CL1, L60-63); and the different discrete components must be electrically interconnected (CL2, L48-49). It would have been obvious to one of ordinary skill in the art at the time of Applicants' invention to modify the robotic system controller of **Lahiri et al.** with the system controller of **Bashan et al.** that included a controller operative to access the information and control a system to produce one or more of the desired feature using the accessed information. The artisan would have been motivated because smart cards would have a programmable microcomputer for bi-directional communication; and an antenna coil in the chip card to receive data from and transmit data to a reading device a having a similar antenna; and the different discrete components must be electrically interconnected.

8.2 As per claims 15 and 16, **Lahiri et al.** and **Bashan et al.** teach the robotic system controller of claim 14. **Lahiri et al.** does not expressly teach that the information comprises a desired location for a corresponding feature; and the information comprises the dimensions of the of a corresponding feature. **Bashan et al.** teaches that the information comprises a desired location for a corresponding feature; and the information comprises the dimensions of the of a

corresponding feature (CL2, L6-8; CL2, L26-29; CL2, L17-25), because locations and dimensions of the features of smart cards are laid down by the International standard (CL2, L6-8). It would have been obvious to one of ordinary skill in the art at the time of Applicants' invention to modify the robotic system controller of **Lahiri et al.** with the system controller of **Bashan et al.** that included the information comprising a desired location for a corresponding feature; and the information comprising the dimensions of the of a corresponding feature. The artisan would have been motivated because locations and dimensions of the features of smart cards are laid down by the International Standard.

8.3 As per claim 17, **Lahiri et al.** and **Bashan et al.** teach the robotic system controller of claim 14. **Lahiri et al.** teaches that the controller is further operative to control a robotic system (CL3, L36-41 and CL3, L50-54).

Lahiri et al. does not expressly teach that the controller is further operative to control a robotic system including a wire implanting apparatus operative to stake a wire antenna in a card substrate. **Bashan et al.** teaches that the controller is further operative to control a system including a wire implanting apparatus operative to stake a wire antenna in a card substrate (CL3, L49-51; CL6, L39-42), because the antenna must be embedded in the body of the card and be connected to the chip which is part of the electronic module (CL2, L45-49). It would have been obvious to one of ordinary skill in the art at the time of Applicants' invention to modify the robotic system controller of **Lahiri et al.** with the system controller of **Bashan et al.** that included the controller being further operative to control a system including a wire implanting apparatus operative to stake a wire antenna in a card substrate. The artisan would have been

motivated because the antenna must be embedded in the body of the card and be connected to the chip which is part of the electronic module.

8.4 As per claim 19, **Lahiri et al.** and **Bashan et al.** teach the robotic system controller of claim 14. **Lahiri et al.** teaches that the controller is further operative to control a robotic system (CL3, L36-41 and CL3, L50-54).

Lahiri et al. does not expressly teach that the controller is further operative to control a robotic system including a welding apparatus operative to bond ends of the wire antenna to contact tabs on an IC module. **Bashan et al.** teaches that the controller is further operative to control a system including a welding apparatus operative to bond ends of the wire antenna to contact tabs on an IC module (CL6, L43-47), because different discrete components must be electrically interconnected for bi-directional data communication (CL2, L45-4; CL1, L9-11). It would have been obvious to one of ordinary skill in the art at the time of Applicants' invention to modify the robotic system controller of **Lahiri et al.** with the system controller of **Bashan et al.** that included the controller being further operative to control a system including a welding apparatus operative to bond ends of the wire antenna to contact tabs on an IC module. The artisan would have been motivated because different discrete components must be electrically interconnected for bi-directional data communication.

8.5 As per claim 1, **Lahiri et al.** teaches a method comprising:

generating a computer-aided design (CAD) drawing file including a desired card design, the CAD drawing file including information description of desired card features (CL2, L62 to CL3, L3);

accessing the information in the CAD drawing file (CL3, L36-41); and controlling a robotic system using the accessed information (CL3, L36-41 and CL3, L50-54).

Lahiri et al. does not expressly teach generating a computer-aided design (CAD) drawing file including a desired contactless smart card design, the CAD drawing file including information description of desired card features; and controlling a robotic system to produce one or more of the desired feature using the accessed information. **Bashan et al.** teaches generating a file including a desired contactless smart card design, the file including information description of desired card features; controlling a system to produce one or more of the desired feature using the accessed information (CL1, L9-11; CL1, L23-25; CL1, L53-56; CL1, L60-63; CL1, L64-67; CL2, L36-37; Fig. 2), because smart cards have a programmable microcomputer for bi-directional communication (CL1, L9-11; CL1, L23-25); an antenna coil in the chip card to receive data from and transmit data to a reading device a having a similar antenna (CL1, L60-63); and the different discrete components must be electrically interconnected (CL2, L48-49). It would have been obvious to one of ordinary skill in the art at the time of Applicants' invention to modify the method of **Lahiri et al.** with the method of **Bashan et al.** that included generating a file including a desired contactless smart card design, the file including information description of desired card features; controlling a system to produce one or more of the desired feature using

the accessed information. The artisan would have been motivated because smart cards would have a programmable microcomputer for bi-directional communication; an antenna coil in the chip card to receive data from and transmit data to a reading device a having a similar antenna; and the different discrete components must be electrically interconnected.

8.6 As per claim 2, **Lahiri et al.** and **Bashan et al.** teach the method of claim 1. **Lahiri et al.** teaches that the information comprises positional information in a Cartesian coordinate system (CL2, L62 to CL3, L3; CL3, L36-41 and CL3, L50-54).

8.7 As per Claims 3, 4, 8 and 11 and 22, 23, 27 and 30 these are rejected based on the same reasoning as Claims 15, 16, 17 and 19, supra. Claims 3, 4, 8 and 11 are method claims and claims 22, 23, 27 and 30 are article comprising a machine-readable medium claims reciting the same limitations as Claims 15, 16, 17 and 19, as taught throughout by **Lahiri et al.** and **Bashan et al.**

8.8 As per claim 12, **Lahiri et al.** and **Bashan et al.** teach the method of claim 1. **Lahiri et al.** does not expressly teach that the information includes a desired position of the bonds. **Bashan et al.** teaches that the information includes a desired position of the bonds (CL6, L43-47; CL6, L54-57), because the wire bonds must be routed on the surface of the substrate from the integrated circuit to the two pads of the coil antenna (CL6, L54-57). It would have been obvious to one of ordinary skill in the art at the time of Applicants' invention to modify the method of **Lahiri et al.** with the method of **Bashan et al.** that included the information including a desired

position of the bonds. The artisan would have been motivated because the wire bonds must be routed on the surface of the substrate from the integrated circuit to the two pads of the coil antenna.

8.9 As per claim 13, **Lahiri et al.** and **Bashan et al.** teach the method of claim 1. **Lahiri et al.** teaches the method further comprising:

modifying the CAD drawing file, the CAD drawing file including modified information description of at least one new desired card feature (CL2, L62 to CL3, L3);
accessing the modified information in the CAD drawing file (CL3, L36-41); and
controlling a robotic system using the accessed information (CL3, L36-41 and Cl3, L50-54).

Lahiri et al. does not expressly teach controlling a robotic system to produce the new desired feature using the accessed information. **Bashan et al.** teaches controlling a system to produce the new desired feature using the accessed information features (CL1, L9-11; CL1, L23-25; CL1, L53-56; CL1, L60-63; CL1, L64-67; CL2, L36-37; Fig. 2), because smart cards have a programmable microcomputer for bi-directional communication (CL1, L9-11; CL1, L23-25); an antenna coil in the chip card to receive data from and transmit data to a reading device a having a similar antenna (CL1, L60-63); and the different discrete components must be electrically interconnected (CL2, L48-49). It would have been obvious to one of ordinary skill in the art at the time of Applicants' invention to modify the method of **Lahiri et al.** with the method of **Bashan et al.** that included controlling a system to produce the new desired feature using the

accessed information. The artisan would have been motivated because smart cards would have a programmable microcomputer for bi-directional communication; an antenna coil in the chip card to receive data from and transmit data to a reading device having a similar antenna; and the different discrete components must be electrically interconnected.

8.10 As per Claims 20, 21, 31 and 32, these are rejected based on the same reasoning as Claims 1, 2, 12 and 13, supra. Claims 20, 21, 31 and 32 are article comprising a machine-readable medium claims reciting the same limitations as Claims 1, 2, 12 and 13, as taught throughout by **Lahiri et al.** and **Bashan et al.**

9. Claims 5 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Lahiri et al.** (U.S. Patent 6,385,762) in view of **Bashan et al.** (U.S. Patent 6,719,206), and further in view of **Tushie et al.** (U.S. Patent 6,014,748).

9.1 As per claim 5, **Lahiri et al.** and **Bashan et al.** teach the method of claim 1. **Lahiri et al.** does not expressly teach that the information includes parameters for an operation. **Tushie et al.** teaches that the information includes parameters for an operation (CL2, L38-41; CL2, L51-54; CL4, L31-36), because the information would permit a card issuer to dynamically change card applications, card, card operating systems and personalization equipment in the card issuing process (CL2, L41-45). It would have been obvious to one of ordinary skill in the art at the time of Applicants' invention to modify the method of **Lahiri et al.** with the method of **Tushie et al.** that included the information including parameters for an operation. The artisan would have

been motivated because the information would permit a card issuer to dynamically change card applications, card, card operating systems and personalization equipment in the card issuing process.

9.2 As per Claim 24, it is rejected based on the same reasoning as Claim 5, supra. Claim 24 is an article comprising a machine-readable medium claim reciting the same limitations as Claim 5, as taught throughout by **Lahiri et al.**, **Bashan et al.** and **Tushie et al.**

10. Claims 6 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Lahiri et al.** (U.S. Patent 6,385,762) in view of **Bashan et al.** (U.S. Patent 6,719,206) and **Tushie et al.** (U.S. Patent 6,014,748), and further in view of **Laroche et al.** (U.S. Patent 6,566,163).

10.1 As per claim 6, **Lahiri et al.**, **Bashan et al.** and **Tushie et al.** teach the method of claim 5. **Lahiri et al.** does not expressly teach that the parameters include a speed value, an ultrasonic energy value, and a pressure value for controlling a wire antenna implanting apparatus. **Laroche et al.** teaches that the parameters include a speed value, an ultrasonic energy value, and a pressure value for controlling a wire antenna implanting apparatus (CL3, L15-29), because the conventional technique of wire bonding applies soldering a wire by thermocompression to achieve desired mechanical strength, reliability and manufacturing cost (CL1, L48-51; CL1, L29-32). It would have been obvious to one of ordinary skill in the art at the time of Applicants' invention to modify the method of **Lahiri et al.** with the method of **Laroche et al.** that included the parameters including a speed value, an ultrasonic energy value, and a pressure value for

controlling a wire antenna implanting apparatus. The artisan would have been motivated because conventional technique of wire bonding would apply soldering a wire by thermocompression to achieve desired mechanical strength, reliability and manufacturing cost .

10.2 As per Claim 25, it is rejected based on the same reasoning as Claim 6, supra. Claim 25 is an article comprising a machine-readable medium claim reciting the same limitations as Claim 6, as taught throughout by **Lahiri et al.**, **Bashan et al.**, **Tushie et al.** and **Laroche et al.**

11. Claims 7 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Lahiri et al.** (U.S. Patent 6,385,762) in view of **Bashan et al.** (U.S. Patent 6,719,206), **Tushie et al.** (U.S. Patent 6,014,748) and **Laroche et al.** (U.S. Patent 6,566,163), and further in view of **Craven et al.** (U.S. Patent 6,437,751).

11.1 As per claim 7, **Lahiri et al.**, **Bashan et al.**, **Tushie et al.** and **Laroche et al.** teach the method of claim 6. **Lahiri et al.** does not expressly teach that the feature comprises a wire antenna pattern and the information comprises a number of windings. **Bashan et al.** teaches that the feature comprises a wire antenna pattern and the information comprises a number of windings (CL1, L60-63; CL3, L49-51), because when contactless data transmission is required, an antenna in the chip card is used to receive data from and transmit data to a reading device having a similar antenna (CL1, L60-63). It would have been obvious to one of ordinary skill in the art at the time of Applicants' invention to modify the method of **Lahiri et al.** with the method of **Bashan et al.** that included the feature comprising a wire antenna pattern and the

information comprising a number of windings. The artisan would have been motivated because when contactless data transmission is required, an antenna in the chip card is used to receive data from and transmit data to a reading device having a similar antenna.

Lahiri et al. does not expressly teach that the information comprises a size and a shape: of the wire. **Craven et al.** teaches that the information comprises a size and a shape: of the wire (CL7, L45; CL14, L14-16), because many factors are involved in designing the antenna such as efficiency, input impedance, radiation pattern and the polarization of the radiated energy and size and shape of the antenna (CL7, L42-46). It would have been obvious to one of ordinary skill in the art at the time of Applicants' invention to modify the method of **Lahiri et al.** with the method of **Craven et al.** that included the information comprising a size and a shape: of the wire. The artisan would have been motivated because many factors would be involved in designing the antenna such as efficiency, input impedance, radiation pattern and the polarization of the radiated energy and size and shape of the antenna.

11.2 As per Claim 26, it is rejected based on the same reasoning as Claim 7, *supra*. Claim 26 is an article comprising a machine-readable medium claim reciting the same limitations as Claim 7, as taught throughout by **Lahiri et al.**, **Bashan et al.**, **Tushie et al.**, **Laroche et al.** and **Craven et al.**

12. Claims 9, 10, 18, 28 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Lahiri et al.** (U.S. Patent 6,385,762) in view of **Bashan et al.** (U.S. Patent 6,719,206), and further in view of **Sienz et al.** (U.S. Patent 6,118,245).

12.1 As per claim 18, **Lahiri et al.** and **Bashan et al.** teach the robotic system controller of claim 14.

Lahiri et al. does not expressly teach that the controller is further operative to control a pick-and-place robot. **Sienz et al.** teaches that the controller is further operative to control a pick-and-place robot (CL1, L25-34; CL2, L19-23), because pick-and-pace robots are used in the manufacture of printed circuit boards to place electronic components on the board at pinpoint accuracy and execute the point-to-point movement at high speed (CL1, L29-34). It would have been obvious to one of ordinary skill in the art at the time of Applicants' invention to modify the robotic system controller of **Lahiri et al.** with the system controller of **Sienz et al.** that included the controller being further operative to control a pick-and-place robot. The artisan would have been motivated because pick-and-pace robots are used in the manufacture of printed circuit boards to place electronic components on the board at pinpoint accuracy and execute the point-to-point movement at high speed.

Lahiri et al. does not expressly teach that the controller is further operative to place an integrate circuit (IC) module in a hole in the card substrate. **Bashan et al.** teaches that the controller is further operative to place an integrate circuit (IC) module in a hole in the card substrate (Fig. 2; CL2, L21-25; CL6, L50-51), because the chip is part of the electronic module and must be connected to the antenna which is applied to the surface of the substrate (CL2, L45-49; CL6, L41-42). It would have been obvious to one of ordinary skill in the art at the time of Applicants' invention to modify the robotic system controller of **Lahiri et al.** with the system controller of **Bashan et al.** that included the controller being further operative to place an

integrate circuit (IC) module in a hole in the card substrate. The artisan would have been motivated because the chip is part of the electronic module and must be connected to the antenna which is applied to the surface of the substrate.

12.2 As per Claims 9 and 28 these are rejected based on the same reasoning as Claim 18, supra. Claims 9 and 28 are method and article comprising a machine-readable medium claims reciting the same limitations as Claim 18, as taught throughout by **Lahiri et al.**, **Bashan et al.** and **Sienz et al.**

12.3 As per claim 10, **Lahiri et al.**, **Bashan et al.** and **Sienz et al.** teach the method of claim 9. **Lahiri et al.** does not expressly teach that the information includes the length and width of the IC module in the card substrate and a desired location of the IC module in the card substrate. **Bashan et al.** teaches that the information includes the length and width of the IC module in the card substrate and a desired location of the IC module in the card substrate (Fig. 2; CL2, L21-25; CL3, L21; CL6, L50-54), because size and location of the chip are specified in the International Standard (CL2, 17-25); and the chip must be connected to the antenna which is located in the substrate (CL2, L45-49; CL6, L50-53). It would have been obvious to one of ordinary skill in the art at the time of Applicants' invention to modify the method of **Lahiri et al.** with the method of **Bashan et al.** that included the information including the length and width of the IC module in the card substrate and a desired location of the IC module in the card substrate. The artisan would have been motivated because size and location of the chip are specified in the

International Standard; and the chip must be connected to the antenna which is located in the substrate.

12.4 As per Claim 29, it is rejected based on the same reasoning as Claim 10, supra. Claim 29 is an article comprising a machine-readable medium claim reciting the same limitations as Claim 10, as taught throughout by **Lahiri et al.**, **Bashan et al.** and **Sienz et al.**

Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Kandasamy Thangavelu whose telephone number is 571-272-3717. The examiner can normally be reached on Monday through Friday from 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Teska, can be reached on 571-272-3716. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-9600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

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published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

K. Thangavelu
Art Unit 2123
February 25, 2005



KEVIN J. TESTA
SUPERVISORY
PATENT EXAMINER